The effect of one session of high velocity low amplitude thrust manipulation (HVLA) at the cervicothoracic junction (CTJ) and thoracolumbar junction (TLJ) in healthy female elite waterpolo players on maximal throwing speed performance, functional movement (SPADI and DASH questionnaire), pain (NPRS questionnaire), range of motion (inclinometer (CTJ, TLJ and shoulder) and strength of the muscles in the shoulder region by hand-held dynamometer.

Published: 31-01-2017 Last updated: 16-04-2024

In this study we are interested in the effect of high velocity low amplitude thrust manipulation at the cervical-thoracic junction and thoracic-lumbar junction in healthy elite female water polo players on :maximum throwing speedfunctional movement...

Ethical reviewApproved WMOStatusRecruitment stoppedHealth condition typeOther conditionStudy typeInterventional

Summary



NL-OMON42864

Source

ToetsingOnline

Brief title

effect of manipulation CTJ and TLJ on waterpolo throwing performance

Condition

Other condition

Synonym

throwing speed and movement of the shoulder

Health condition

algehele beweeglijkheid van de schoudergordel, cervicothoracale overgang en de thoracolumbale overgang bij gezonde personen

Research involving

Human

Sponsors and support

Primary sponsor: Vrije Universiteit Brussel

Source(s) of monetary or material Support: Onderzoeker zelf

Intervention

Keyword: shot velocity, Spinal manipulation, water polo, women

Outcome measures

Primary outcome

maximum throwing speed

functional movement SPADI, DASH,

pain NRS

range of motion of the shoulder

strength of the shoulder muscles

Secondary outcome

Relatie between throwing speed and shoulder problems

Study description

Background summary

Manipulative therapy is nowadays common in elite sports although the working mechanism isn*t totally clear. In the support staff of the Dutch national women water polo two of the members are physiotherapist skilled in manual therapy. During the last decade every team member had a high-velocity, low-amplitude thrust manipulation during her career, most of them improved after treatment and could perform well. The team was very successful during the last tournaments and became vice World champion and vice European champion. Also the coaches, former players, use frequently high velocity low amplitude thrust manipulation at the cervical-thoracic junction for a better functional movement. In the fields of manual therapy and water polo it*s believed by al the national coaches and players that manual therapy contributes to an improvement in the shoulder function. Although water polo requires high levels of physical fitness the throwing velocity and capacity is considered to be one of the most important aspects of the game. *

The shoulder function is a key factor in the throwing capacity of the athlete and disorders in the shoulder region are a major concern for the medical staff of the water polo teams.

Study objective

In this study we are interested in the effect of high velocity low amplitude thrust manipulation at the cervical-thoracic junction and thoracic-lumbar junction in healthy elite female water polo players on : maximum throwing speed functional movement SPADI, DASH, pain NRS range of motion of the shoulder strength of the shoulder muscles

Study design

explorative cross over double blind

Intervention

Manuel manipulation

Study burden and risks

The study is integrated in the normal training of the national team in a relative easy period

So no burdens or risk are expected

Contacts

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age

Adults (18-64 years) Elderly (65 years and older)

Inclusion criteria

Member of the Dutch national women water polo selection

Exclusion criteria

shoulder injury

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Study design

Design

Study type: Interventional

Intervention model: Crossover

Allocation: Randomized controlled trial

Masking: Double blinded (masking used)

Control: Active

Primary purpose: Treatment

Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 31-01-2017

Enrollment: 12

Type: Actual

Ethics review

Approved WMO

Date: 31-01-2017

Application type: First submission

Review commission: METC Universitair Medisch Centrum Utrecht (Utrecht)

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register ID

CCMO NL57056.041.16